ED 118 303

32

RC 008 977

AUTHOR

Scott, Norval C., Jr.

TITLE

Zip Test: Examiner's Manual.

INSTITUTION

SPONS AGENCY >

Butte County Superintendent of Schools, Oroville,

Calif.; California State Dept. of Education, Sacramento. Div. of Compensatory Education.

Bureau of Elementary and Secondary Education

(DHEW/OE), Washington, D.C. Div. of Compensatory

Education.

29p.; For related document, see ED 081 846; one page NOTE

of tabular material is of marginal legibility

EDRS PRICE DESCRIPTORS MF-\$0.83 HC-\$2.06 Plus Postage

Achievement Tests; *Diagnostic, Tests; Elementary School Mathematics; *Elementary School Students; *Grouping (Instructional Purposes); *Language .

Fluency; Language Tests; Manuals; *Migrant Child Education: Reading Diagnosis: Reading Level: Test

Reliability; Test Validity

IDENTIFIERS

*Zip Test

ABSTRACT

Purpose of the Zip Test is to locate the instructional level at which a child can effectively use a mathematics book and a reader and to indicate his ability to conceptualize verbally in English. Designed to determine quickly and with reasonable accuracy the grade placement of a migrant child in reading and math and to assess his English language facility, the test facilitates the migrant child's rapid placement into a productive learning situation upon his arrival at school and eliminates vital periods of "sterile exposure" to learning situations in which he cannot respond. The test is divided into 3 sections: Language Facility, Reading, and Math. This examiner's manual presents the directions for administering each section of the Zip Test. Most of the directions are in English and Spanish. Zip Tips are given to indicate timesaving shortcuts and helpful hints. The manual also includes directions for: (1) administering math worksheets, (2) scoring the test, and (3) transferring scores from a tab sheet to a locator form. The assessment of the reliability and validity of the Math and Reading sections is discussed. (NQ)

Documents acquired by ERIC include many informal unpublished * materials not available from other sources. ERIC makes every effort * * to obtain the best copy available. Nevertheless, items of marginal *

* reproducibility are often encountered and this affects the quality

* of the microfiche and hardcopy reproductions ERIC makes available

* via the ERIC Document Reproduction Service (EDRS). EDRS is not

* responsible for the quality of the original document. Reproductions *

* supplied by EDRS are the best that can be made from the original.

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT. OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ZIP TEST >

EXAMINER'S MANUAL



REGION II OFFICE OF MIGRANT EDUCATION

A Component of the California Plan
for the Education of Migrant Children

California State Department of Education
Office of Compensatory Education
Bureau of Community Services and Migrant Education
ESEA - Title I - P. L. 89-750

KC108977

EXAMINER'S MANUAL

for

ZIP TEST

Developed by Project EDINN
A Supplementary Educational Center which serves
Monterey, San Benito, Santa Cruz Counties, California

Norval C. Scott, Jr.

Program Associate

Published by
Butte County Office of Education
Thomas E. Evans, Superintendent

In Cooperation with
California State Department of Education
Office of Compensatory Education
Bureau of Community Services and Migrant Education
ESEA - Title I - P. L. 89-750

The material contained herein was performed pursuant to a grant from the United States Office of Education, Department of Health, Education, and Welfare, and funded through Title I and Title III of the Elementary and Secondary Education Act of 1965 (P. L. 89-10).

TABLE OF CONTENTS

	•							•				Page
ACKNOWLEDGMENTS .			• •	• •	•		•	•	•	•	•	ii
FOREWORD		• •			•		•	•	•	•	•	i i/i
GENERAL DIRECTIONS	S	• •	• •	•	•	• •	•,	•	•	•	•	1
LANGUAGE FACILITY	SECTION .	• •		• •	•			•	•	•	•	2
READING SECTION					• •	٠			,			
Part A - Word	d Recognit	ion	• •	• •	•	• •	•	•	•	•	•	. 4
Part B - Read	ding Compr	ehens	ion		•		•	•	•	•	•	5
Part C - Word	d Opposite			• •	•	• •	•	•	•		•	9
MATH SECTION		• • •	•. •	• •	•	• •	•	•	•	•	•	10
TRANSFERRING FROM	TAB SHEET	ר ָדס ב	OCAT	OR	FOR	м .	•	•	•	•	•	12
TABLE FOR MATH OPI	ERATION LE	VELS			•	• 😘	•	•	•	•	•	13
RELIABILITY AND V	ALIDITY .	• •		• •	•		•	•	•	•	•	15
SAMPLE TAB SHEET			•									•
SAMPLE LOCATOR FOR	RM					•	•					

ERIC.

ACKNOWLEDGEMENTS

We are grateful to many persons for their helpful suggestions and assistance in the development of the Zip Test. The teachers, teaching-aides, and administrators in the Central Salinas Valley of Monterey County are to be commended for their part in the . first stage of the test's development.

A vital part was played by the educational personnel of Merced,
San Joaquin, and Butte Counties during the second stage of the
instrument's field testing. Many thanks are due the curriculum
coordinators, teachers, teaching-aides, school secretaries, MiniCorpsmen and administrators who were involved in this phase of the
operation.

We extend our thanks to Dr. Norval C. Scott, who directed the development and field testing of the Zip Test.

Finally, we are most grateful to the many migrant children who were involved in the various phases of the development. Their response to the added attention which the test provided them was heart-warming.

FOREWORD

The Zip Test was developed in response to a survey taken in the Central Salinas Valley of Monterey County, California, which indicated a pressing need for an instrument that could be administered by any available competent adult. It must determine quickly and with réasonable accuracy the grade placement of a migrant child in reading and math and assess his English language facility.

The purpose of the test is to <u>locate</u> the instructional level at which a child can effectively use a mathematics book and a reader, and to indicate his ability to conceptualize verbally in the English Language. This test should not be used for chronological grade placement. The test facilitates the migrant child's rapid placement into a productive learning situation upon his arrival at school and eliminates vital periods of sterile exposure to learning situations in which he cannot respond.



ZIP TEST

INSTRUCTIONS AND SCORING MANUAL

This test is divided into three sections: Language Facility, Reading and Math.

GENERAL DIRECTIONS

Before you begin, make the student feel at ease as much as possible. All directions to be read by the tester are in CAPITAL LETTERS and ENCLOSED IN BOXES in this manual.

The test can be given more quickly and accurately if the tester follows the ZIP TIPS. Look for them--they will indicate timesaving shortcuts and helpful hints.

Always administer the Language Facility Section first, the Reading Section next, and the Math Section last.

Most directions are in English and in Spanish. Use the suggested Spanish if the child understands little or no English.

Getting Acquainted

Before you begin, place the child's name and other necessary information at the top of the TAB SHEET, LOCATOR FORM, and MATH WORKSHEETS. Use the Short Form of the MATH WORKSHEETS for 6 and 7 year olds ONLY.

Below is a sample dialogue for getting acquainted.

SAY: HI! HOW ARE YOU? PLEASE SIT DOWN.

MY NAME IS ... WHAT IS YOUR NAME? ... HOW OLD ARE YOU? ... I

DON'T SPEAK SPANISH VERY WELL, BUT IF YOU HELP ME WITH MY SPANISH, I WILL

HELP YOU WITH YOUR ENGLISH. O.K.? FIRST, I WOULD LIKE TO TELL YOU WHY YOU

ARE HERE.

WE HAVE A TEST TO HELP YOU IN SCHOOL. DO THE BEST YOU CAN. REMEMBER THERE IS NO RUSH, SO TAKE YOUR TIME.

HI! ¿CÓMO ESTÁS? ¡SIÉNTATE!
YO ME LLAMO . ¿CÓMO TE LLAMAS TU? . ¿CUÁNTOS AÑOS TIENES?
NO HABLO ESPAÑOL MUY BIEN, PERO SI TU MĒ AŸUDAS CON EL ESPAÑOL, YO TE AYUDO
CON EL INGLÉS. ¿BUENO? ¿SABES PORQUÉ TE LLAMAMOS?

NOSOTROS TENEMOS UN EXAMEN QUE TE AYUDARÁ EN LA ESCUELA. ¿QUIERES AYUDAR NOS? HABER QUE TAMBIEN PUEDES CONTESTAR. NO NECESITAS APRESURARTE (APURARTE). TOMA TU TIEMPO.

Begin the Language Facility Section. Turn to page 1 of the ZIP TEST.



LANGUAGE FACILITY SECTION

In this section the child is presented with pictures of everyday objects and scenes in order to determine his English Language Facility. This section is NOT a test of perception. Instead, it is meant to measure the child's ability to conceptualize in the English Language. Therefore, AVOID asking the child questions like "What do you see in this picture?" See the ZIP TIP that follows.

```
ZIP TIP: The tester is to encourage the child, when he pauses, by stating:
Z
Z
   IS THERE ANYTHING ELSE?
                       QUE QUIERES DECIR?
Z
Z
Z
   TELL ME MORE, IF YOU WISH.
                         HABER QUE MAS ME QUIERES DECIR.
Z
Z
Z
Z
   YOU ARE DOING FINE. KEEP GOING.
                            VAS MUY BIEN. SIGUELE (CONTINUA).
Z -
  These remarks usually are sufficient to encourage a child to make his maximum
  response. Any more help than this will cause the results to vary.
```

DIRECTIONS FOR ADMINISTERING:

Call the child's attention to the pictures on page one.

SAY: TELL ME, IN ENGLISH, ALL THAT YOU CAN ABOUT EACH PICTURE WHEN I POINT TO IT.

DÍME, EN INGLÉS, TODO LO QUE PUEDAS DEL RETRATO QUE TE ENSEÑO.

LISTO? COMENZAMOS!

Record'the results for this page on the ZIP TAB SHEET. See the scoring Section that follows.

Now turn to page 2 of the ZIP TEST.

Repeat the same instructions given for page 1, above.

Record these scores on the TAB SHEET.



DIRECTIONS FOR SCORING ON TAB SHEET:

For every response a child makes, circle a score number (See scoring key below) on the ZIP TAB SHEET for the picture being observed on that page.

Example:

Page 1

Picture	Response Number							
a .	0 1 2 3 4 5							
b	0 1 2 3 4 5							
С	0 1 2 3 4 5							
d	0 1 2 3 4 5							

Page 1 tota1 = 13

Scoring Key

O point for no response for a picture

- 1 point for single words; e.g., "key" or "boy" or "flower"
- 2 points for short phrases; e.g., "man working" or "boy running" or "the flower"
- 3 points for short sentences; e.g., "It's a flower." or "The boy is walking."
- 4 points for uninterrupted, longer sentences; e.g., "The boy is running up the hill." or "The boy is sitting at the table."
- 5 points for an <u>uninterrupted</u>, multiphrased sentence; e.g., "The chair is broken and it is in the corner." or "The man is digging the ground with his shovel and the sun is smiling."

The directions for transferring the scores from the TAB SHEET to the ZIP LOCATOR FORM are on page 12 of this manual.

Turn to the READING SECTION of this manual.

Turn to page 3 of the ZIP TEST.



READING SECTION

Part A -- Word Recognition

DIRECTIONS FOR ADMINISTERING:

SAY: PLEASE READ THE WORDS ON EACH LINE UNTIL I SAY "STOP," O.K?

POR FAVOR LEE LAS PALABRAS EN CADA LINEA, HASTA YO TE DIGA "PARA." LEBUENO?

Let the child read words until he misses 2 (or more) per line.

DIRECTIONS FOR SCORING ON TAB SHEET:

As the child reads, place a tally (1) for each correct response and a minus (-) for each incorrect response on the line indicated on the TAB SHEET under Word Recognition. See example below.

Circle the highest book level which has five tallies. Below line 1, allow one error per line in order for the child to continue reading.

See page 12 of this manual for directions to transfer the scores from the TAB SHEET to the LOCATOR FORM.

Now, turn to page 5 of the ZIP TEST, Word Opposites, part C, if the child has successfully read the five words on the bottom line of page 3. Otherwise, go directly to the MATH SECTION of this manual.



PART B -- READING COMPREHENSION

Turn to page 4 of the ZIP TEST.

Read the ZIP TIP at the end of the Word Recognition Section of this manual before proceeding.

DIRECTIONS FOR ADMINISTERING:

Start the child on the story that is at the child's highest Word Recognition level. The child may refer to the story while he is being questioned.

Note: If a child is stuck on a word, tell him to go right on. It is important that he receive no help with any words, except the names of people.

DIRECTIONS FOR SCORING ON TAB SHEET:

Place a plus (+) for positive responses, a minus (-) for negative responses on the appropriate lines on the TAB SHEET. Circle the highest level in which the child answered 4 of 5 questions correctly. Directions for transferring this score to the ZIP LOCATOR FORM are on page 12 of this manual.

STORY A

READ THIS STORY OUT LOUD. IT IS ABOUT TWO BOYS, JUAN AND ROBERTO. THEN I SHALL ASK YOU SOME QUESTIONS ABOUT THE STORY.

- 1. Q. What did Juan want to do?
 - A. Play
- Book Leve1
- 2. Q. What did Roberto have?
 - A. A. toy.
- pp3
- 3. Q. What color was the toy?
 - A. Blue
- 4. Q. What color was the house?
 - A. Green
- 5. Q. Where were the boys going to play?
 - A. At the house.
- *Answers are approximate.



READ THIS STORY OUT LOUD. IT IS ABOUT A GIRL NAMED MARIA. THEN I SHALL ASK YOU SOME QUESTIONS ABOUT THE STORY.

- 1. Q. What was Father going to do?
 - A. Paint.
- 2. Q. Who wanted to help Father?
 - A. Maria.

Book Leve 1

- 3. Q. What was the new color of the truck?
 - A. Yellow.

P

- 4. Q. What did Maria say about the new color?
 - A. It was a good color.
- 5. Q. What did Father say about the truck?
 - A. It would go fast to the store.

STORY C

READ THIS STORY OUT LOUD. IT IS ABOUT LETTUCE. THEN I SHALL ASK YOU SOME QUESTIONS ABOUT THE STORY.

- 1. Q. What did the woman see?
 - A. Lettuce.
- 2. Q. Where was the lettuce?
 - A. On a farm.

Book Leve 1

- 3. Q. Why did the woman want the lettuce?
 - A. For a picnic.
- 4. Q. What did the man do?
 - A. Gave her some lettuce.
- 5. Q. What did the woman do with the lettuce?
 - A. Put it in a basket. .

STORY D

READ THIS STORY OUT LOUD. IT IS ABOUT JOSE AND MARIA. THEN I SHALL ASK YOU SOME QUESTIONS ABOUT THE STORY.

- 1. Q. Where did Jose live?
 - A. On a farm.
- 2. Q. Who worked in the field?
 - A. Jose.

Book Leve I

- 3. Q. What did Jose's sister do?
 - A. Milked the cows.

21

- 4. Q. What did Jose do when he was done working?
 - A. Played near the fence.
- 5. Q. Where did the family god.
 - A. To town.

STORY E

READ THIS STORY OUT LOUD. IT IS ABOUT A SQUIRREL WHO WAS HUNGRY. THEN I SHALL ASK YOU SOME QUESTIONS.

- 1. Q. Where did the squirrel live?
 - A. In a tree.
- 2. Q. Why did he climb down the tree?
 - A. To look for nuts.

Book Level

- 3. Q. What happened first when he reached the ground?
 - A. A dog barked at him.

22

- 4. Q. What did the squirrel think?
 - A. The dog was after him.
- 5. Q. Why did the squirrel have an empty mouth?
 - A. The squirrel was scared and went back up before he had time to get any nuts.

READ THIS STORY OUT LOUD. IT IS ABOUT A BOY NAMED ERNEST WHO LIKED TO PLAY BASEBALL.

- 1. Q. Did Ernest see all the ball game?
 - A. No.
- 2. Q. What did Ernest want to do the next time the boys played, baseball?
 - A. Play too.

Book Leve 1

31

- 3. Q. What did he remember that he had to do?
 - A. Carry wood.
- 4. Q. When did he have to bring in the wood?
 - A. Early, (or), tomorrow.
- 5. Q. After Ernest finished working, what could be do?
 - A. Play baseball.

Turn to page 5 of the ZIP TEST.

DIRECTIONS FOR ADMINISTRATION:

Next to each number is a word. The child's task is to point to (or say) the word on the same line that is the opposite, or nearly the opposite of that word. The examiner must give no help to the child either with the pronunciation of a word or by way of encouragement. MAINTAIN A NEUTRAL COMPOSURE.

From 3^2 to 7, a minimum of 7 correct is necessary to proceed to the next level. At level 7+, the child must get 3, or more correct.

Work the example at the top of page 5 first, making sure the child understands the idea:

SAY: FIND THE WORD ON EACH LINE THAT MEANS THE OPPOSITE, OR NEARLY THE OPPOSITE, AND POINT TO IT.

DIRECTIONS FOR SCORING:

Place a plus (+) on the TAB SHEET for positive responses, a minus (-) for negative responses. Circle the highest level in which the child answered 7 or more correctly.

```
1. smoothly -roughly
1. east
           -west
                                                            2. perfect
                                                                        -wrong
2. easy
           -hard
                               2. clever
                                           -stupid.
                            3. hollow
                                           -full
                                                            3. succeed
                                                                        -fail
3. gentle -wild
                                                            4. wisdom
                               4. fastened -loose
                                                                        -nonsense
4. part
           -whole
                               5. inch
                                           -mile
                                                          -5. rising
                                                                        -sinking
           -vegetables
5. meat
                                                            6. alert
                                                                        -unaware
                               6. growling -smiled
6. merry
          -discontented
                                                            7 Stilted
                                                                       . -level
7. mind
           -body
                               7. palace
                                           -garage
                                           -pitch
                                                                        -nice
8. silly
          -smart
                               8. he1d
                                                            8. rude
                                                            9. scarce
                               9. gathered -spread
                                                                        -plentiful
9. swift
           -slow
                                                           10. appear
                                                                        -vanish
                              10. resting -scampered
10. wide
          Lthin
```

	6	•	7	7+		
1. slender 2. queer 3. started 4. ugly 5. reward 6. ignorant 7. sensible 8. terrified 9. brilliant	-broad -regular -complete -handsome -punishment -educated -bewildered -undaunted -dul1	1. rugged 2. plumb 3. superior 4. reverence 5. congratulate 6. admiration 7. reveal 8. tragic 9. stout	-sleek -spiral -inferior -sneer -criticize -hatred -deceive -humorous -fragile	1. affable 2. cumbersome 3. distorted 4. benefactor 5. remote 6. triumph	-concise	

10. joyous

Now, go on to the math section.

-released



10. bound

-solemn

MATH SECTION

Pages 8, 9, and 10 of the ZIP TEST are for younger children, ages 6 or 7.

DIRECTIONS FOR ADMINISTRATION TO YOUNGER CHILDREN:

Turn to pages 8-9 of the ZIP TEST.

SAY: THESE OBJECTS ON BOTH PAGES ARE IN GROUPS. I WILL POINT TO ONE GROUP. YOU POINT TO ANOTHER GROUP THAT HAS THE SAME NUMBER IN IT AS MINE. REMEMBER, THE GROUPS ARE ON BOTH PAGES.

Use the Spanish Section below if the child does not understand English

SAY: LAS COSAS EN ESTAS DOS PAGINAS ESTÁN EN GRUPOS. CUANDO YO TE ENSENE UN GRUPO, QUIERO QUE TU BUSQUES OTRO GRUPO QUE TENGA EL MISMO NUMERO DE OBJETOS (COSAS). ACUÉRDATE, LOS GRUPOS ESTÁN EN LAS DOS PAGINAS.

Don't hesitate to ad lib if the child does not understand what he must do after you have read the instructions.

Turn to page 10 of the ZIP TEST.

SAY: POINT TO 2. APUNTA AL NUMERO DOS (2).

Repeat for 5, 8, 3, 9, 4, 6.

DIRECTIONS FOR SCORING RESULTS OF PAGES 8-10:

If the child succeeds in identifying the groups on pages 8-9, place a check on the TAB SHEET next to "knows sets."

If the child correctly identifies the numerals on page 10, place a check on the TAB SHEET next to "knows numerals."

Now, give the child who knows his sets and numerals a copy of the Math Worksheets, Short Form. The child who does not know his sets or numerals is finished with the test at this point.



DIRECTIONS FOR ADMINISTERING MATH WORKSHEETS:

Give the child his MATH WORKSHEETS (younger children will get the SHORT FORM, older children the LONG FORM).

Start the child at the level suggested for his age ON THE TABLE THAT FOLLOWS. (See page 13 of this manual).

SAY: WORK THE PROBLEMS IN THIS ROW UNTIL I TELL YOU TO/STOP.

If the child fails on the suggested row, back up to a row in which he can succeed.

DIRECTIONS FOR SCORING:

The highest level in each section at which the child demonstrates that he understands the process being tested is his level to record on the TAB SHEET. Place the grade designations on the TAB SHEET to indicate the child's math levels.

Directions for transferring the scores from the TAB SHEET to the LOCATOR FORM are on page 12 of this manual.



TRANSFERRING FROM THE TAB SHEET TO THE LOCATOR FORM

The LOCATOR FORM is made to follow the child to the classroom for the teacher's information.

LANGUAGE FACILITY SECTION:

CIRCLE the numbers on the LOCATOR FORM that are the closest to the child's GRAND TOTAL of Pages 1 and 2.

READING SECTIONS:

- A. Word Recognition--Transfer the circled score from the TAB SHEET to the LOCATOR FORM. It is NOT necessary to transfer Word Recognition Scores of children who successfully progress to WORD OPPOSITES or who must read stories in the Reading Comprehension Section.
 - NOTE: If the child can read no words on the top line, mark RR on the LOCATOR FORM next to Word Recognition. If the child can read only 4 words, or less on the top line, mark PP on the LOCATOR FORM next to Word Recognition.
- B. Reading Comprehension -- Transfer the circled score to the Reading Comprehension Section on the LOCATOR FORM. Otherwise, leave blank.
- C. Word Opposites -- Transfer the circled score to the Word Opposites Section on the LOCATOR FORM,

MATH SECTION:

Transfer the grade level designation for <u>each</u> section indicated for the child. Children ages 6-7 will usually have only Addition and Subtraction levels to indicate. Older children, ages 8 on up, will usually have these two plus Multiplication, Division and Fraction levels.

If the child does not know his sets or numerals, place a check above the line next to Math Readiness on the LOCATOR FORM.

If a child knows his sets and numerals, yet cannot successfully work in Row A in Addition or Row A in Subtraction, place a check in level 1 for Addition on the LOCATOR FORM.



Table for Operation Levels

	_	0perat	ion	Answers in order	Book Level
. •		Additi	on Adds 2 numbers, sums to 10	3, 5, 8, 6, 9	1
	6/7 r. 01ds	(в.	Adds 2 numbers, sums to 19	10, 13, 17, 18, 19	<u>↑</u> .
	, 6 Yr.	\c.	Adds 2 digit to 1 digit numerals no carrying	28, 37, 79, 88	-
•	•	/,D.	Column addition, no carrying	19, 19	
	•		Adds 2 digits to 2 digit numerals, no carrying	79, 99	* 2
,	01ds	F.	Adds, 1 digit addend, carrying to 10's	60, 72, 87	
	Year	G.	Adds, 2 digit addend, carrying to 10's'	132, 112, 161	
AREAS	8/8	/ H-	Adds, 2 digit addend, carrying to 100's	501, 401	
S TAR TING	•	\ 1.	Adds, 3 digit addend, carrying to 10's	761, 752	
	10 Yrs	•	Adds, 3 digit addend, carrying to 100's	1222, 1501, 1122	4
SUGGES TED		Subtra	ction		. 0
SUGC	7 01 ds	/A.	Subtracts, numbers to 10	3, 2, 2, 7, 4	
	6/7 Yr. 01ds	\ B.	Subtracts, numbers to 19	13, 11, 15	\uparrow
# ·		/ c.	Subtracts, 1 digit number from 2 digit number, no borrowing	43, 23, 62	
	d's	D.	Subtracts, 2 digit number from 2 digit number, no borrowing	52, 13, 37	2
	8/9 Year 01ds	E.	Subtracts, 1 digit subtrahend borrowing to 10's	73, 59, 26	
	¥ 6/8	F.	Subtracts, 2 digit subtrahend, 2 digit minuend, borrowing to 10's	8, 29, 53	
		\ G .	Subtracts, 2 digit subtrahend, borrowing to 10's	424, 318	3
•	Yrs. Up	Н.	Subtracts, 3 digit subtrahend, 3 digit minuend, borrowing to 10's	424, 117	
	2 4	\1.	Subtracts, 3 digit subtrahend		•
		·	100's	89, 356, 168	4

Table for Operation Levels (cont.)

	Operat	ion	Answers, in order	Book Level
* Make	Multip #A.	lication Multiplication facts, through 505	6, 16, 18, 27, 32, 36, 30, 45	3
sure older children try at	В.	Multiplication facts, through 9's	24, 48, 63, 49, 40, 56, 54, 72	
least one multi-	· Ć.	Multiplies, 2 digits by 1 digit multiplier	99, 255, 492, 592	4
plication and one division	•	Multiplies, 2 digits by 2 digit multiplier	3618; 3496; 2632	-
problem		Multiplies, 3 digits by 2 digit multiplier	26,568; 59,954	6
•	F.	Multiplies, 3 digits by 2 digits, with decimals	. 6.0536; 40.85	7
	Divisi	on		
	• A.	Divides, with remainder, 1 digit divisor	14 R 3; 13 R 3	\ <u>\</u>
are	В.	Divides, with remainder, 10's divisor	6 R 8; 2 R 12	
	С.	Divides, with remainder, 2 digit divisor	343 R 12; 114 R 47	6
	D.	Divides, 2 digit divisor, with decimals	1.11; 30.3	7
	Fracti	ons		
		Adds proper fractions, same denominator	4/3 = 1 1/3; 9/6 = 1 3/6 = 1 1/2	1
. •	В.	Subtracts proper fractions from mixed fractions	1 2/5; 2/6 = 1/3	*
	. c.	Adds mixed fractions, same denominator	15 6/12 = 15 1/2 28 2/10 = 28 1/5; 5 3/5	5
	D.	Subtracts whole number from mixed fraction	4, 4/5; 4 3/5	
•	ε.	Adds mixed fractions, different denominators	5 7/12; 11 5/4 = 12 1/4	
	F.	Subtracts mixed fractions, different denominators	9 1/16; 5 3/10	

Record highest book level in each applicable section of the Zip Locator Form.



RELIABILITY AND VALIDITY

RELIABILITY PROCEDURES

During the first stage of development, the reliability of the Math and Reading sections of the Zip Test was assessed by a test-retest procedure at intervals of approximately one week. Migrant children in a 1968 summer school program in Monterey County were used as subjects, at grade levels ranging from the first to the sixth. The first tests were administered by sixteen teacher participants who were involved in a curriculum workshop at the school. A different set of teachers administered the retest. No special instructions were given to the teachers prior to their first test administration, in order to determine the effectiveness of the instructions in the examiner's manual of the Zip Test.

In the <u>second stage</u> of development of the <u>Math</u> and <u>Reading Sections</u>,

125 migrant children, who were participating in a 1969 summer school program

for grades one through six, were administered the Zip Test at one-week intervals.

As in the first stage, a different person administered the retest. A variety

of school personnel was used in the testing program. Credentialled teachers,

teacher-aides, school secretaries, reading specialists, and mini-corpsmen were

involved in order to test the usefulness of the Zip Test with persons represent
ing a wide range of experience and background. The children in this stage were

tested in Regions II and III-B of the state of California.

The reliability of the <u>Language Facility</u> Section of the Zip Test was also assessed by the test-retest method during the <u>first stage</u> of development, involving the same children used in the Reading and Math Testing procedures. Results for this section were more variable than those for Reading and Math. For the <u>second stage</u>, the <u>Language Facility Section</u> was redeveloped and field-tested for its reliability during the summer of 1969 in Regions II and III-B



in the state of California. The Split-half method was used to determine the reliability of this section. Two techniques for obtaining the two halves of the test were used: first, the child's total score for the pictures on page one were correlated with his total for those on page two. Second, the eight pictures used as stimuli for this section were randomly divided into two groups. Each child's total score for each group of pictures was then used to determine the reliability coefficient. Corrections for length of the test for each method were made by using the Spearman-Brown Formula.

Reliability Results

The results for the reliability coefficients and related data from both stages of the test development are found in Tables 1 and 2. Pearson Product Moment correlation coefficients were obtained from the test-retest method for the Reading, Math, and Language Facility Sections of the Zip Test. The Spearman-Brown Formula was used again to correct the Language Facility Section for length in stage two of the test development.

Table 1

Reliability Coefficients and Related Data for Stage One

Zip Test	No. of	Reliability	Tes	t, '	Retest		
Section	Cases	Coefficient	Mean	s.D.	Mean	S.D.	
English Lang. Fac.	53	.71	12.55	4.97	13.79	4.46	
Reading	53	.94	9.43	6.27	9.09	6.33	
Math	53	•97	6.13	4.36	6.32	4.36	

Table 2
Reliability Coefficients and Related Data for Stage Two

Zip Test	No. of	No. of Reliability		t	Retest	
Section	Cases	Coefficient	Mean	S.D.	Mean	S.D.
Language Facility	200	Method 1 Method 2	22.34	12.01		
Reading	125	.97	4.16	3.27	4.23	3.28
Math	125	.93-	3.58	1.67	3.57	1.66

*Corrected for length by Spearman-Brown Formula

VALIDITY PROCEDURES

The development of the Zip Test included three types of validity.

Content Validity

The <u>Language Facility</u> Section of the test was developed using as stimuli pictures of items that would be familiar to the migrant child; e.g., a hoy eating at a table.

The Reading Section was divided into three parts: a Word Recognition

List, a Reading Comprehension Section, and a Word Opposites List. The words

in the Word Recognition List were chosen from the State Adopted Reading Text

Word Lists at each reading level. Preliminary field testing of this word list
indicated that it had high discriminating ability.

A Reading Comprehension Section was not included at the start of the test development since the Word List was considered to be sufficient at the time. However, when the list was used on recently arrived migrant children, it verified the earlier premise that many of them could read the English words but had no comprehension of their meaning. Consequently, the Reading Comprehension Section was developed, covering reading levels from the pre-primer through the third



reader level. For each particular level, 75% of the words in a paragraph were taken from the lists of the same level of the State Adopted Reading Texts (Ginn Series). The remaining 25% of the words were below this particular level.

The Word Opposites Lists were made up of words taken from the third to the sixth reader level of the State Adopted Reading Texts (Ginn Series) and field—tested for their discrimination ability. Comparison of these results with those of the California Achievement Test scores for reading were made. The results indicated that the Word Opposites List did discriminate between the reading levels tested.

The content of the <u>Math</u> Section was carefully selected from the State

Adopted Math Texts for each level. The areas of addition, subtraction, multiplication, division, and fractions were chosen for development.

Concurrent Validity

For the Reading and Math Sections of the Zip Test, the initial stage of development provided satisfactory levels of validity. The independent judgment of eight teachers experienced with migrant children was the criterion against which the results of the test were compared. Two groups of teachers from Monterey County were involved. The first group of teachers (Teacher Interviewers) consisted of two teachers, (a primary and an intermediate person) from each of four schools. Their task was to interview approximately eight children apiece at a school other than their own, and at a grade level which was proximate to the one which they regularly taught. Each of these teachers (Teacher Interviewers) had approximately thirty minutes to place an individual child in a reader and a math book. The interviewing was done away from the teacher's "home" school because his very subjective judgment, the criterion against which the test would be compared, might tend to operate with less restraint in a school



where he did not know the children. The administrators indicated that these teachers were selected because of their competence in the classroom.

The second group (Zip Teachers) consisted of two other teachers from each school. Each had the task of administering the Zip Test to approximately eight pupils who had been interviewed previously by the Teacher Interviewers. The placement levels given for each child by the Teacher Interviewers and the Zip Teachers provided the data for determining the correlation coefficients. A total of 69 children was used in this part of the validity procedure.

The <u>Language Facility</u> Section of the Zip Test required two stages of development before the validity reached satisfactory limits. During <u>stage one</u>, the same sets of teachers, pupils and procedures were used for Language Facility as were used for Reading and Math, which have been already reported. The eight Teacher Interviewers rated the English Language Facility of each child on a ten point scale, 1 being the lowest score, ten the highest. At another time during this first stage, the Language Facility Section of the Zip Test (along with the Reading and Math portions) was administered by the Zip Teachers. Each child's total score for page 2 of the Language Facility section was correlated with the rating given him by the Teacher Interviewers to obtain the validity coefficient.

During the <u>second stage</u>, seven credentialled teaching personnel from Region II, experienced in working with migrant children, listened to individual tape-recordings of eighteen migrant children who were responding to the pictures of page 2 of the Language Facility Section of the Zip Test. The teachers were instructed to rate each child on a 1 to 5 scale for his English Language Facility, one being the lowest through to five the highest. The teachers were not aware of the nature of the stimuli. This fact was important since the task of the teacher observers was to concentrate on the child's ability to conceptualize, not judge the child on his perceptual acuity. The Zip Test rating of these



same eighteen children were then correlated with the ratings by the teacher observers.

Construct Validity

The scoring section of the <u>Language Facility</u> Section of the Zip Test was compared with the methods used by the same seven teaching personne; who observed the eighteen tapes mentioned above.

The observers were instructed to list the criteria which they used to discriminate between the levels of English Language Facility of the children involved in the taping sessions. All seven of the observers reported that a low rating went to a child who gave a one-word answer, a complete sentence obtained a middle rating, and a high rating was given for longer, more complex sentence. These results agree very closely with the scoring procedure used in the Language Facility Section of the Zip Test (See page 3 of this manual).

VALIDITY RESULTS

The results for the validity findings are found in Tables 3 and 4.

Table 3
Validity Coefficients and Related Data
For Language Facility (Stage One)

Correlation (Coefficient	No. of	Zip Test	Results*	Criterion Results**		
	Cases	Mean	S.D.	Mean	s.D.	
•77	69	11.87*	5.09	4.55	2.38	

*Total possible score for each child is 20. **Total possible score for each child is 10.



Table 4
Validity Coefficients and Related Data
(Stage Two)

Zip Test	No. of	Correlation	Zip Test	Results	Criterion Results		
Section	Cases	Coefficient	Mean	S.D.	Mean	S.D.	
Language Facility	126	.895	2.48	1.32	2.53	1.19	
Reading	69	.93	5.71	3.09	5.68	3.29	
Math	69	•94	3.78	1.54	3.65	1.28	

LANGUAGE FACILITY SECTION

Picture	Response Number	Picture	Response Number	
a	0 1 2 3 4 5	e	0 1 2 3 4 5	
b	0 1 2 3 4 5	f	0 1 2 3 4 5	
c.	0 1 2 3 4 5	ġ	0 1 2 3 4 5	Grand Total,
d	0 1 2 3 4 5	h	0 1 2 3 4 5	Pages 1 & 2
Page 1	Tota1	Page 2	Tota1	21

. READING SECTION

Word	Recognit Part A	ion	Reading Com Part	В		Word Oppo	
PP ²	come <u>*</u>	///	STORY A	STORY D	1	1	1
рр3	for 1	<u>+++</u>	2	2	3	_ <u>3</u>	3.
P	big /	11-1	4.	3. <u> </u>	5	_ 5	5
1	call /	<u>HL</u>	2	5	7	_	7
(21)	after 7	1714	STORY B	STORY E	8	_ 8 _ 9	8
22	made /	<u>11</u>	2	2	10.	10	_ 10
31	because_		4	4	1	_ 1	1. 7+
32	early _		5	5	3	_ 2 3	3
4	against_		STORY C-	STORY F	4. <u>-</u>	_ 4	5
			3.	3	76.	_ 6 7	6
			5	5	8. <u>.</u> 9. <u>.</u> 10. <u>.</u>	8 9 10	

MATH SECTION

Knows sets	• •		Knows nume	rals_	•	•		
*Addition Level_(3		*Multiplic	ation	Leve			
*Subtraction Level	2	*Div	ision Level_		·	*Fraction	Leve1_	********

*Grade Designation

SAMPLE

28

SAMPLE

29